

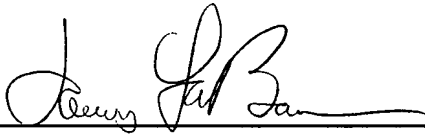
A7 18. (New) The device of claim 13, wherein said film has a thickness in the  
range of 5-15  $\mu\text{m}$ .

**REMARKS**

Entry of the foregoing amendment is respectfully requested. This amendment is  
intended to place the claims in a more conventional format and eliminate the multiple  
dependency of the claims.

Respectfully submitted,

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**Attachment to Preliminary Amendment dated December 13, 2001**

**Marked-up Claims 1-14**

1. (Amended) A method for manufacturing a device with an integrated circuit chip [such as a smart card or an electronic label; this device having a support (2) associated] with at least one active surface [such as a chip (6) with a front face (6a)] provided with at least one connection pad [(12)] and an opposite face [(6b); this], said method comprising the steps [consisting] of:

initially providing [for the active circuit] a thin active circuit [(6)] which has mechanical flexibility[, such as a chip (6) or flat-screen display; keeping];

affixing the thin active [surface (6) fixed] circuit to a stiffening substrate [(8) through] via its opposite face [(6b) referred to as the first face; removing the active circuit (6) from its stiffening substrate (8); mounting the active circuit (6) on a final support (2); characterised by the steps consisting in:

- presenting the active circuit in] to form an assembly composed of [this] the thin active circuit [(6)] and the stiffening substrate [(8)];

[-] forming in the general plane of a face [(2a)] of [the] a final support [(2)] a communication interface [(4)] having at least one element [(4b)] for connection with the active circuit [(6), on the final support (2); then];

[-] presenting this assembly, comprising the active circuit [(6)] with its stiffening substrate [(8)], against the communication interface [(4)], with the connection pad [(12)] against a corresponding connection element [(4b; 24a, 24b)];

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[-] fixing and electrically coupling the connection pad [(12)] with [its] a  
corresponding connection element [(4b; 24a, 24b), for example by laser welding; then]; and  
[-] removing the stiffening substrate [(8)] from the opposite face [(6b)].

2. (Amended) A method according to Claim 1, [characterised in that] wherein  
the communication interface [(4) is formed or produced in the form] comprises at least one  
of an ohmic contact area [(4a) and/or] and antenna area [(24),] protruding on a portion of a  
surface in the [overall] general plane of the face [(2a)] of the final support [(2)].

3. (Amended) A method according to Claim 1 [or 2, characterised in that]  
wherein the connection pad [(12)] is fixed and coupled with its respective connection  
element [(4b; 24a; 24b)] by welding by means of a laser beam [(16),] which passes through  
the stiffening substrate [(8)] and the active circuit [(6)], [this] said substrate [(8)] and circuit  
[(6)] being transparent to the wavelength used for the welding, [this wavelength being for  
example 1.06  $\mu\text{m}$ ] whilst the pad [(12)] and/or the connection element [(4b; 24a, 24b)] is  
fusible under the effect of [this] said laser beam.

4. (Amended) A method according to [one of Claims 1 to 3, characterised in  
that] claim 1 wherein the support [(2)] for fixing the active circuit [(6)] is in roll form.

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**Marked-up Claims 1-14**

5. (Amended) A method according to [one of Claims 1 to 4, characterised in that it includes] claim 1 further including, after the step of removing the stiffening substrate [(8)], a step of depositing, on the opposite face [(6b)], a protective film [(22), for example with a thickness of 5 to 15  $\mu\text{m}$ , and] by lacquer printing[, provided that the communication interface has at least one ohmic contact area (4a) and a step of masking or removing the material of this film (22) on this area (4a) is possibly provided].

6. (Amended) A method according to [one of Claims 1 to 5, characterised by] claim 1 further including a step of cutting the assembly including the active circuit [(6)] and the stiffening substrate [(8)] into an assembly cut substantially to the dimensions of the circuit [(6)], before the step of presenting this assembly [(6, 8)].

7. (Amended) A method according to [one of Claims 1 to 6, characterised in that] claim 1 wherein each pad [(12)] is fixed with its respective connection element [(4b; 24a, 24b)] by [compression,] a compression force [being] that is applied through the stiffening substrate [(8)] of the assembly [(6, 8)].

8. (Amended) A method according to Claim [1 or] 6, [characterised in that] wherein the connection pad [(12)] is fixed and coupled with its respective connection element [(4b; 24a, 24b)] by welding by means of a laser beam [(16),] which passes through

FOOTNOTES

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**Marked-up Claims 1-14**

the stiffening substrate [(8)] and the active circuit [(6)], [this] said substrate [(8)] and circuit [(6)] being transparent to the wavelengths used for the welding, [this wavelength being for example 1.06  $\mu\text{m}$ ] whilst the pad [(12)] and/or the connection element [(4b; 24a, 24b)] is fusible under the effect of [this] said laser beam.

9. (Amended) Tooling [able to implement] for implementing the method according to Claim [6, characterised in that it includes] 8, comprising a laser with a wavelength [for example] of 1.06  $\mu\text{m}$ , whose beam [(16)] is transmitted by a plurality of optical paths [(20)], each directed towards a respective pad [(12)] of the active circuit [(6)], in order to effect welds in parallel.

10. (Amended) Tooling according to Claim 9, [characterised in that] wherein each optical path is produced by at least one optical fibre [(20)].

11. (Amended) Tooling according to Claim 9 [or 10, characterised in that] wherein the optical paths [(20)] are integrated in a tool for positioning and/or holding the assembly [(6, 8)] vis-à-vis the final support [(2)].

12. (Amended) A device with an integrated-circuit chip [such as a smart card (6) or electronic label; this device having a support (2) associated with] comprising at least

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**Marked-up Claims 1-14**

one active circuit [such as a chip (6)] with a front face [(6a)] provided with at least one connection pad [(12)] and an opposite face [(6b); this], said active circuit being a thin active circuit [(6)] which has mechanical flexibility, [such as a chip (6) or flat-screen display, and being] and which is mounted on [a final] said support [(2)]; [characterised in that it has:]

[-] an interface in the overall plane of one face [(2a)] of the [final] support [(2) an interface (4)] for communication with at least one element [(4b)] for connection with the active circuit [(6), on the final support (2)] and;

[- its] said connection pad [(12)] being fixed and electrically coupled against a corresponding connection element [(4b; 24a, 24b), for example by laser welding] on said interface.

13. (Amended) A device according to Claim 12, [characterised in that it has] further including a protective film [(22) with a thickness for example of 5 to 15  $\mu\text{m}$ , such as a printed lacquer, with a limited extent or even] over the [entire] surface of the support [(2)].

14. (Amended) A device according to Claim 12 [or 13, characterised in that] wherein the thickness of the connection elements and of the active circuit [(6)] with its pads is less than 50 microns.

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